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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/529,612

03/30/2005

Kenneth Andrew Hughes

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E I du Pont de Nemours & Company
Legal Patents
Wilmington, DE 19898

EXAMINER

SHTERENGARTS, SAMANTHA L

ART UNIT	PAPER NUMBER
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1626

MAIL DATE	DELIVERY MODE
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05/19/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/529,612	Applicant(s) HUGHES ET AL.	
	Examiner Samantha L. Shterengarts	Art Unit 1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on January 26, 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 8-12 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Amendments filed January 26, 2009 are acknowledged. All rejections not explicitly maintained herein are withdrawn.
2. Due to Applicant's amendment of the scope of compounds of formula I in instant claim 1, the following are new grounds for rejection necessitated by amendment.
3. Applicants bring to Examiner's attention that at the time the present invention was made, it was owned by the same assignee of Lahm et al., WO 01/070671.

See MPEP 2141.01: A 35 U.S.C. 103 rejection is based on 35 U.S.C. 102(a), 102(b), 102(e), etc. depending on the type of prior art reference used and its publication or issue date. For instance, an obviousness rejection over a U.S. patent which was issued more than 1 year before the filing date of the application is said to be a statutory bar just as if it anticipated the claims under 35 U.S.C. 102(b). While section 2141.01 uses the example of an obviousness rejection over a U.S. patent for a statutory bar, it is merely an example, and the rule applies similarly to the instant case, where the obviousness rejection is made over a WIPO publication issued more than 1 year before the filing date of the instant application. It is said to be a statutory bar just as if it anticipated the claimed under 35 U.S.C. 102(b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
4. Claims 1-5 and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lahm et al. (WO 01/070671).

Determination of the scope and contents of the prior art

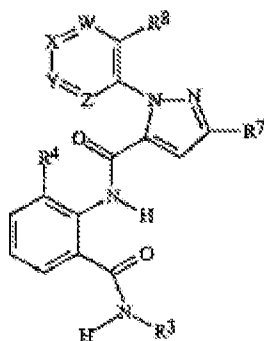
The instant claims are drawn to a Markush group of compounds that are useful for controlling an invertebrate pest. The reference, Lahm et al., teaches methods for controlling arthropods comprising contacting the arthropods or their environment with an arthropodically effective amount of compound of formula I and compositions containing compounds of formula I. Lahm et al. teaches homologues of instantly claimed compounds and compositions of formula I.

Ascertaining the differences between the instant claims and the prior art

The following compounds of Lahm et al., as taught in Table 9, starting on page 75, are obvious variants of the instantly claimed compounds of formula I.

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Table 9



W	X	Y	Z	R ³	R ⁴	R ⁷	R ⁸
CH	CH	CH	CH	i-Pr	Me	CN	Me
CH	CH	CH	CH	i-Bu	Me	CN	Me
CH	CH	CH	CH	i-Pr	Cl	CN	Me
CH	CH	CH	CH	i-Bu	Cl	CN	Me
CH	CH	CH	CH	i-Pr	Br	CN	Me
CH	CH	CH	CH	i-Bu	Br	CN	Me
CH	CH	CH	CH	i-Pr	Me	CN	F
CH	CH	CH	CH	i-Bu	Me	CN	F
CH	CH	CH	CH	i-Pr	Cl	CN	F
CH	CH	CH	CH	i-Bu	Cl	CN	F
CH	CH	CH	CH	i-Pr	Br	CN	F
CH	CH	CH	CH	i-Bu	Br	CN	F
CH	CH	CH	CH	i-Pr	Me	CN	Cl
CH	CH	CH	CH	i-Bu	Me	CN	Cl
CH	CH	CH	CH	i-Pr	Cl	CN	Cl
CH	CH	CH	CH	i-Bu	Cl	CN	Cl
CH	CH	CH	CH	i-Pr	Br	CN	Cl
CH	CH	CH	CH	i-Bu	Br	CN	Cl

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CH	CH	CH	CH	i-Pr	Me	CN	Br
CN	CH	CH	CH	i-Bu	Me	CN	Br
CN	CH	CH	CH	i-Pr	Cl	CN	Br
CH	CH	CH	CH	i-Bu	Cl	CN	Br
CH	CH	CH	CH	i-Pr	Br	CN	Br
CH	CH	CH	CH	i-Bu	Br	CN	Br
CH	CH	CH	CH	i-Pr	Me	CN	CN
CH	CH	CH	CH	i-Bu	Me	CN	CN
CH	CH	CH	CH	i-Pr	Cl	CN	CN
CH	CH	CH	CH	i-Bu	Cl	CN	CN
CH	CH	CH	CH	i-Pr	Br	CN	CN
CH	CH	CH	CH	i-Bu	Br	CN	CN
CH	CH	CH	N	i-Pr	Me	CN	Me
CH	CH	CH	N	i-Bu	Me	CN	Me
CH	CH	CH	N	i-Pr	Cl	CN	Me
CH	CH	CH	N	i-Bu	Cl	CN	Me
CH	CH	CH	N	i-Pr	Br	CN	Me
CH	CH	CH	N	i-Bu	Br	CN	Me
CH	CH	CH	N	i-Pr	Me	CN	F
CH	CH	CH	N	i-Bu	Me	CN	F
CH	CH	CH	N	i-Pr	Cl	CN	F
CH	CH	CH	N	i-Bu	Cl	CN	F
CH	CH	CH	N	i-Pr	Br	CN	F
CH	CH	CH	N	i-Bu	Br	CN	F

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CH	CH	CH	N	1-Pr	Me	CN	Cl
CH	CH	CH	N	1-Bu	Me	CN	Cl
CH	CH	CH	N	1-Pr	Cl	CN	Cl
CH	CH	CH	N	1-Bu	Cl	CN	Cl
CH	CH	CH	N	1-Pr	Br	CN	Cl
CH	CH	CH	N	1-Bu	Br	CN	Cl
CH	CH	CH	N	1-Pr	Me	CN	Br
CH	CH	CH	N	1-Bu	Me	CN	Br
CH	CH	CH	N	1-Pr	Cl	CN	Br
CH	CH	CH	N	1-Bu	Cl	CN	Br
CH	CH	CH	N	1-Pr	Br	CN	Br
CH	CH	CH	N	1-Bu	Br	CN	Br
CH	CH	CH	N	1-Pr	Me	CN	CN
CH	CH	CH	N	1-Bu	Me	CN	CN
CH	CH	CH	N	1-Pr	Cl	CN	CN
CH	CH	CH	N	1-Bu	Cl	CN	CN
CH	CH	CH	N	1-Pr	Br	CN	CN
CH	CH	CH	N	1-Bu	Br	CN	CN

The difference between compound of formula I and the compounds of Lahm et al. are that on position R⁵ of the instant claims, substituents must be –CH₂CN and in Lahm et al., the –CH₂ group does not exist, and –CN is the substituent at instant position R⁵.

Resolving the level of ordinary skill in the pertinent art – Prima facie case of obviousness

MPEP 2144.08.II.A.4(c) states, "...consider teachings of a preferred species within the genus. If such a species is structurally similar to that claimed, its disclosure may motivate one of ordinary skill in the art to choose the claimed species or subgenus from the genus, based on the reasonable expectation that structurally similar species usually have similar properties."

To those skilled in the chemical art, one homologue is not an advance over an adjacent member of a homologous series. The reason for this is that one of ordinary skill, knowing the properties of one member of series, would know what properties to expect in adjacent members.

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In re Henze, 85 USPQ 261 (1950), *In re* Wood, 199 USPQ 137 (CCPA 1978), and *In re* Lohr, 137 USPQ 548, 549 (CCPA 1963).

One of ordinary skill would be motivated, from the exemplified embodiments in the prior art disclosure, to make the modification required to arrive at the instant invention with reasonable expectation of success for obtaining an additional compound for the same utility, as taught by Lahm et al. The motivation would be to make additional compounds for the same quoted purpose.

Thus, the instant claims are *prima facie* obvious over the teaching of the prior art.

Claim Objections

5. Claim 6 is objected to for depending on a rejected base claim.

Conclusion

6. No claims are allowed.
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samantha Shterengarts whose telephone number is (571)270-5316. The examiner can normally be reached on Monday thru Thursday 9-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Joseph K. McKane can be reached on 571-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

/Samantha L. Shterengarts/
Examiner, Art Unit 1626

/Kamal A Saeed/
Primary Examiner, Art Unit 1626